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On the Entomofauna of eastern slopes of Alacabük Mountain (Gevaş district, Van Province, East Turkey)

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Abstract: On the Entomofauna of the eastern slopes of Alacabük mountain (Gevaş district, Van Province, East Turkey). *Cesa News* 124: 1-31, 74 figs.

In this paper, totally 245 species of 64 families of 11 orders are given with notes. These orders are: Lepidoptera, Odonata, Mantodea, Orthoptera, Dermaptera, Hemiptera, Homoptera, Planipennia, Diptera, Hymenoptera, Coleoptera. As a result of this study, numerous new faunistical records to the province, or to the district are determined. Among them 76 species of butterflies, and 47 of moths, totally 123 Lepidoptera species are mentioned. Other 10 pterygot orders are represented here by 122 species. Besides, various behaviours of insects during field observations are supported here by original photographs.

Key words: Pterygota, Lepidoptera, Odonata, Mantodea, Orthoptera, Dermaptera, Hemiptera, Homoptera, Planipennia, Diptera, Hymenoptera, Coleoptera, fauna, Alacabük, Altinsaç, Gevaş, Van, Turkey.



Fig. – 1. Altınsaç bay, East of Alacabük Mountain (Gevaş, Van Province, East Turkey), 5 4 2016, M. Kemal (Cesa)

The territory of the eastern slopes of Alacabük Mountain, between Göründü and İnköy villages is perhaps the most picturesque countryside of Van Province in East Turkey (**Fig.1**). Besides, the plant cover and entomofauna of this area are rich (Bingöl, 2004); consequently very important from faunistical and zoogeographical standpoints. The flora of Deveboynu peninsula and its vicinity was studied by Bingöl (2004) and Bingöl et al. (2012). He listed 710 species from between Altınsaç and İnköy area.

The authors of the present paper, visited this territory between 2001 and 2014 at irregular intervals. In recent years, the faunistical results have been published in various publications. However, this is the first preliminary attempt on the entomofauna of this district. As a gratifying aspects, this area as a natural reserve is currently under protection.

The updated species number of the Pterygota in Gevaş district is around 1100 species, and in Van Province is 2671 (cf. Koçak & Kemal, 2012). Illustrated lists of the Pterygota of Gevaş and Van are in preparation.

In the following preliminary list, totally 245 species of 64 families of 11 orders are given. Usually, the subspecies are not cited here. As a result of this first attempt, numerous new faunistical records to the province, or to the district are determined. During field observations, various behaviours of insects, e.g., feeding, resting, basking, copulation or courtship are photographed by the first author. The species are identified by the authors and the material preserved in the Cesa Collection.

The disposition of the Pterygota list of the present paper is given as follows;

Lepidoptera (20 families): Butterflies: Argynnidae, Hesperiidae, Lycaenidae, Papilionidae, Pieridae, Satyridae. Moths: Adelidae, Coleophoridae, Ethmiidae, Geometridae, Lymantriidae, Noctuidae, Oecophoridae, Plutellidae Pyralidae, Saturniidae, Scythridae, Sphingidae, Tortricidae, Zygaenidae.

Odonata (2): Aeshnidae, Coenagrionidae. **Mantodea** (1): Empusidae. **Orthoptera** (2): Acrididae, Tettigoniidae. **Dermoptera** (1): Forficulidae. **Hemiptera** (8): Coreidae, Cydnidae, Lygaeidae, Miridae, Pentatomidae, Rhopalidae, Rhyparochromidae, Tingidae. **Homoptera** (2): Cercopidae, Cicadidae. **Planipennia** (1): Nemopteridae. **Diptera** (9): Asilidae, Bibionidae, Bombyliidae, Nemestrinidae, Platystomidae, Syrphidae, Tephritidae, Tipulidae, Ulidiidae. **Hymenoptera** (8): Apidae, Crabronidae, Cynipidae, Formicidae, Ichneumonidae, Megachilidae, Mutillidae, Vespidae. **Coleoptera** (10): Buprestidae, Carabidae, Cerambycidae, Chrysomelidae, Cleridae, Coccinellidae, Curculionidae, Glaphyridae, Meloidae, Scarabaeidae.



Fig. 2 - *Papilio alexanor* in flight near Van lake at Altinsaç, 27 2009. M. Kemal (Cesa)

Pterygota orders

Lepidoptera

Butterflies

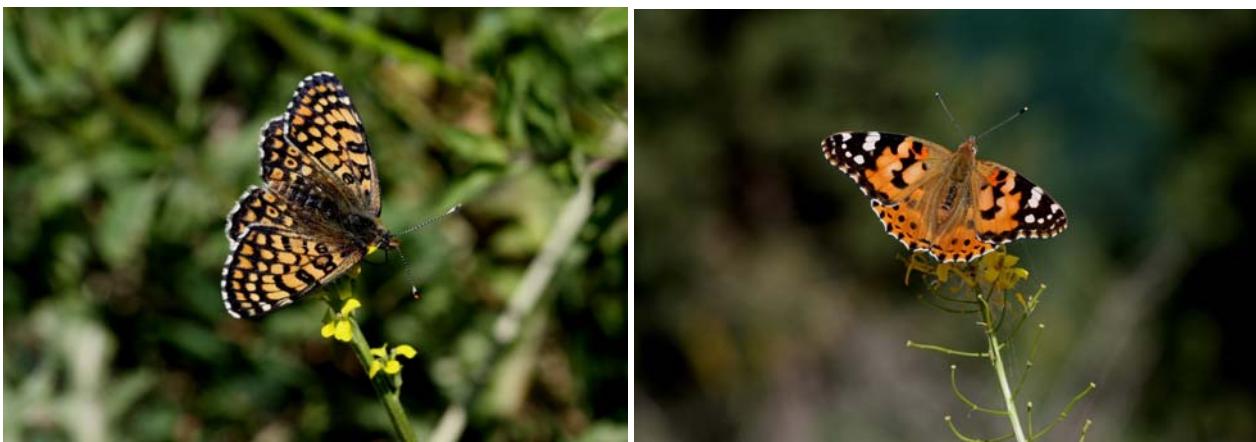
Argynnidae

- 1) **Brenthis hecate** ([Denis & Schiffermüller], 1775) (Argynnidae). This species is uncommon in the district. Adults feed on the flowers of *Thymus* sp. (Lamiaceae). Flight time: June, univoltin (Fig. 3).
- 2) **Issoria lathonia** (Linnaeus, 1758) (Argynnidae). A well known eurasian species, but uncommon in Turkey. Few specimens are observed in the studying area. With two annual generations. On 4th April 2016, newly emerged male from Altinsaç is photographed by the first author (Fig. 4).



Figs. 3, 4 – Left: *Brenthis hecate*, male from Altinsaç 12 06 2013. Right: *Issoria lathonia* (Argynnidae), a basking male of spring generation. Altinsaç 5 4 2016, M. Kemal (Cesa)

- 3) *Limenitis (Azuritis) reducta* Staudinger, 1901** (Argynnidae)
4) *Melitaea (Cinclidia) phoebe* (Goeze, 1779) (Argynnidae)
5) *Melitaea (Didymaeformis) didyma* (Esper, [1779]) (Argynnidae)
6) *Melitaea (s.str.) arduinna* (Fabricius, 1787) (Argynnidae)
7) *Melitaea (s.str.) cinxia* (Linnaeus, 1758) (Argynnidae). Bivoltine species, common in the studying area. Adult is recorded by the first author during feeding on the flowers of a *Brassicaceae* plant (**Fig. 5**).



Figs. 5, 6 – Left: *Melitaea cinxia* (Argynnidae), during feeding. Right: *Vanessa cardui* (Argynnidae), a male at rest. Both from same place and date, Altınsaç 1780m. 6 6 2009. M. Kemal (Cesa)

- 8) *Polygonia (Comma) egea* (Cramer, [1775])** (Argynnidae)
9) *Vanessa (Cynthia) cardui* (Linnaeus, 1758) (Argynnidae). A common and migrant species. On 5th April 2016, the authors observed the first migrating group of *Vanessa cardui* in the studying area. The adult butterflies feed on various flowering plants, and are seen in flight until mid November (**Fig. 6**).
10) *Vanessa (s.str.) atalanta* (Linnaeus, 1758) (Argynnidae). After hibernation, the butterfly of this species is observed in flight on 5th April 2016 at Altınsaç 1780m, for the first time.

Hesperiidae

Like the preceding family, 10 species are recorded in the studying area.

- 11) *Carcharodus (Lavatheria) lavatherae* (Esper, [1783])** (Hesperiidae)
12) *Carcharodus (s.str.) alceae* (Esper, [1780]) (Hesperiidae)
13) *Erynnis (Hesperopegasus) marloyi* (Boisduval, [1834]) (Hesperiidae)
14) *Muschampia proteides* (F. Wagner, 1929) (Hesperiidae)
15) *Muschampia tersa* Evans, 1949 (Hesperiidae)
16) *Pyrgus serratulae* (Rambur, [1839]) (Hesperiidae)
17) *Pyrgus sidae* (Esper, [1784]) (Hesperiidae)
18) *Spialia (Neospialia) orbifer* (Hübner, [1823]) (Hesperiidae)
19) *Thymelicus lineolus* (Ochsenheimer, 1808) (Hesperiidae)
20) *Thymelicus sylvestris* (Poda, 1761) (Hesperiidae). The species is univoltine, and flies from June to July in the studying area. Butterfly feeds on the flower of *Ziziphora* (?) (**Fig. 7**).

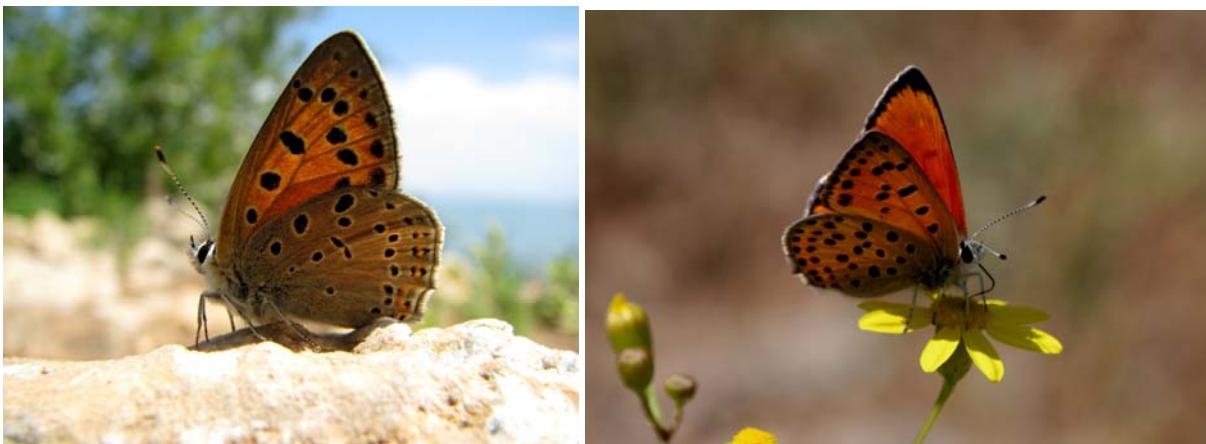


Figs. 7, 8 – Left: *Thymelicus sylvestris* (Hesperiidae), a male butterfly during feeding. Right: *Lycaena euphratica* (Lycaenidae), a male at rest. Both from same place and date, Altınsaç SE 1680m 12 6 2013. M. Kemal (Cesa)

Lycaenidae

In this family, 27 species are recorded in the studying area.

- 21) *Callophrys danchenkoi* Zhdanko, 1998 (Lycaenidae)
- 22) *Celastrina argiolus* (Linnaeus, 1758) (Lycaenidae)
- 23) *Chilades (Freyeria) trochylus* (Freyer, [1843]) (Lycaenidae)
- 24) *Cigaritis uighurica* Kemal & Koçak, 2005 (Lycaenidae)
- 25) *Cupido (s.str.) osiris* (Meigen, [1829]) (Lycaenidae)
- 26) *Glaucopsyche (s.str.) alexis* (Poda, 1761) (Lycaenidae)
- 27) *Lampides boeticus* (Linnaeus, 1767) (Lycaenidae)
- 28) *Lycaena (Margelycaena) euphratica* (Eckweiler, 1989) (Lycaenidae) (Fig. 8)
- 29) *Lycaena (s.str.) phlaeas* (Linnaeus, 1761) (Lycaenidae)
- 30) *Lycaena (Thersamonia) asabinus* (Gerhard, [1850]) (Lycaenidae) (Fig. 9)
- 31) *Lycaena (Thersamonia) kefersteinii* (Gerhard, [1850]) (Lycaenidae). Bivoltine in the studying area. Male feeds on the flowers of *Senecio* sp. (Asteraceae) (Fig. 10).



Figs. 9, 10 – Left: *Lycaena asabinus* (Lycaenidae), at rest. Altınsaç SE 1680m, 23 5 2009. Right: *Lycaena kefersteinii* (Lycaenidae), a feeding male on *Senecio* flower. Altınsaç NW 1780m. 6 6 2009. M Kemal (Cesa)

- 32) *Lycaena (Thersamonia) kurdistanicus* (Riley, 1921) (Lycaenidae)
- 33) *Plebejus (Plebejides) zephyrinus* (Christoph, 1884) (Lycaenidae)
- 34) *Polyommatus (Aricia (s.str.)) agestis* ([Denis & Schiffermüller], 1775) (Lycaenidae)
- 35) *Polyommatus (s.str. (Agrodiaetus (Antidolus))) kurdistanicus* (Forster, 1961) (Lycaenidae)

- 36) *Polyommatus* (s.str. (*Agrodiaetus* (*Transcaspius*))) *turcicola* (Koçak, 1977)
(Lycaenidae)**
- 37) *Polyommatus* (s.str. (*Cyaniris*)) *bellis* (Freyer, [1842]) (Lycaenidae) (Fig. 11)**



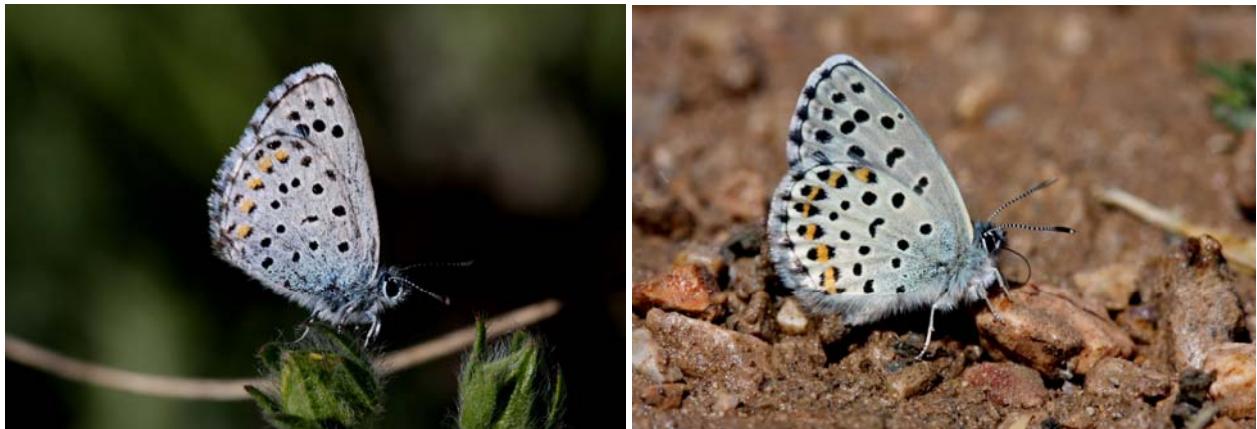
Fig. 11- *Polyommatus bellis* (Lycaenidae), in copula. Altınsaç 1680m, 28 5 2009. M. Kemal (Cesa)

- 38) *Polyommatus* (s.str. (*Meleageria*)) *daphnis* ([Denis & Schiffermüller], 1775)
(Lycaenidae)**
- 39) *Polyommatus* (s.str. (*Plebicula*)) *amandus* (Schneider, 1792) (Lycaenidae)**
- 40) *Polyommatus* (s.str.) *icarus* (Pottemburg, 1775) (Lycaenidae) (Fig. 12)**



Fig. 12- *Polyommatus icarus* (Lycaenidae), in copula. Altınsaç 1680m, 28 5 2009. M. Kemal (Cesa)

- 41) *Pseudophilotes vicrama* (Moore, 1865) (Lycaenidae). Sympatric with *Rubrapterus bavius*. Bivoltine (Fig. 13).**



Figs. 13, 14 – Left: *Pseudophilotes vicrama* (Lycaenidae), a male of spring generation at rest. Right: *Rubrapterus bavius* ssp. *vanicola* (Lycaenidae), sipping mineral water. Both from same place and date, Altınsaç NW 1780m, 6 6 2009. M. Kemal (Cesa)

- 42) ***Rubrapterus bavius* (Eversmann,1832)** (Lycaenidae). An univoltine, common species at malachophyllous mountain steppe, rich with Lamiaceae plants like *Salvia* (Fig. 14).
- 43) ***Satyrium (Nordmannia) abdominalis* (Gerhard,[1850])** (Lycaenidae)
- 44) ***Satyrium (Nordmannia) armenum* (Rebel,1901)** (Lycaenidae)
- 45) ***Satyrium (Nordmannia) zabni* Oorschot & Brink,1991** (Lycaenidae)
- 46) ***Tomares callimachus* (Eversmann,1848)** (Lycaenidae)
- 47) ***Tomares romanovi* (Christoph,1882)** (Lycaenidae). Univoltine, vernal species (Fig. 15).



Fig. 15- *Tomares romanovi* (Lycaenidae), during feeding. Altınsaç SE 1850m 18 5 2013. M. Kemal (Cesa)

Papilionidae

- 48) ***Iphiclides podalirius* (Linnaeus,1758)** (Papilionidae)
- 49) ***Papilio* (s.str. *Alexanoria*) *alexanor* Esper,[1800]** (Papilionidae) (Figs. 2, 16)

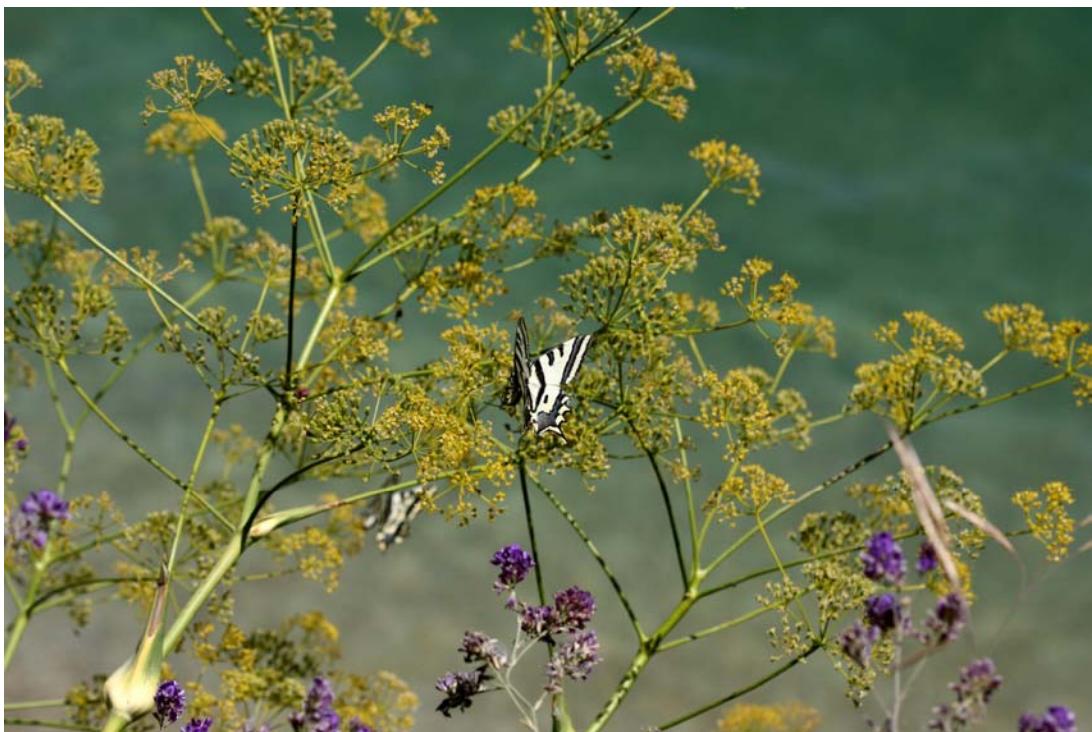


Fig. 16 - *Papilio alexanor* (Papilionidae) on (*Apiaceae*), Altınsaç SE 1670m, 27 2009. M. Kemal (Cesa)

50) Parnassius (Driopa) mnemosyne (Linnaeus, 1758) (Papilionidae) (Fig. 17)



Fig. 17 – *Parnassius mnemosyne* (Papilionidae), a male on *Trifolium* (Fabaceae). Altınsaç NW 1780m, 28 5 2009. M. Kemal (Cesa)

51) Zerynthia (Allancastria) deyrollei (Oberthür, 1869) (Papilionidae)

Pieridae

52) Anthocharis cardamines (Linnaeus, 1758) (Pieridae)

- 53) ***Anthocharis damone* Boisduval, 1836** (Pieridae)
 54) ***Anthocharis grueneri* Herrich-Schäffer, [1851]** (Pieridae). Univoltine vernal species.
 Uncommon in the studying area (Fig. 18).



Figs. 18, 19 - Left: *Anthocharis grueneri* ssp. *armeniaca* (Pieridae), a male at rest. Altınsaç SE 1680m 18 5 2013. Right: *Euchloe ausonia* (Pieridae), a feeding male on *Brassicaceae*. Altınsaç SE 1670m, 28 5 2009. M. Kemal (Cesa)

- 55) ***Aporia (s.str.) crataegi* (Linnaeus, 1758)** (Pieridae)
 56) ***Colias (Eriocolias) crocea* (Fourcroy, 1785)** (Pieridae)
 57) ***Colias (Neocolias) aurorina* Herrich-Schäffer, [1850]** (Pieridae)
 58) ***Euchloe (s.str.) ausonia* (Hübner, [1804])** (Pieridae) (Fig. 19)
 59) ***Gonepteryx (s.str.) farinosa* (Zeller, 1847)** (Pieridae)
 60) ***Gonepteryx (s.str.) rhamni* (Linnaeus, 1758)** (Pieridae)
 61) ***Leptidea duponcheli* (Staudinger, 1871)** (Pieridae)
 62) ***Pieris (Artogeia) ergane* (Geyer, [1828])** (Pieridae)
 63) ***Pieris (Artogeia) pseudorapae* Verity, 1908** (Pieridae)
 64) ***Pieris (Artogeia) rapae* (Linnaeus, 1758)** (Pieridae)
 65) ***Pieris (s.str.) brassicae* (Linnaeus, 1758)** (Pieridae). Bivoltine in the studying area.

First author observed courtship behaviour of the butterflies (Fig. 20).



Fig. 20 – Courtship flight of *Pieris brassicae* (Pieridae), male in flight, female on the ground with open wings. Altınsaç NW 1790m, 6 6 2009. M.Kemal (Cesa)

- 66) *Pontia chloridice* (Hübner, [1813]) (Pieridae)**
67) *Pontia edusa* (Fabricius, 1777) (Pieridae)

Satyridae

- 68) *Chazara (s.str.) bischoffi* (Herrich-Schäffer, [1846]) (Satyridae)**
69) *Chazara (s.str.) briseis* (Linnaeus, 1764) (Satyridae)
70) *Coenonympha (s.str.) pamphilus* (Linnaeus, 1758) (Satyridae)
71) *Esperarge (s.str.) clymene* (Fabricius, 1787) (Satyridae). Univoltine. Preferably visits *Echinops* flowers for feeding or resting in shadow (**Figs. 21, 22**). The authors published on the early stages of this species from Van Province (Kemal & Koçak, 2008).



Figs. 21, 22 – Left: *Esperarge clymene* on the *Echinops* bud (Asteraceae). Right: *Esperarge clymene*, a resting group. Both from same place and date, Altınsaç SE 1680m, 13 07 2013. M. Kemal (Cesa)

- 72) *Hipparchia (Neohipparchia) statilinus* (Hufnagel, 1766) (Satyridae)**
73) *Hyponephele (s.str.) lupina* (Costa, [1836]) (Satyridae)
74) *Melanargia (Turcargia) syriaca* (Oberthür, 1894) (Satyridae) (Fig. 23**)**

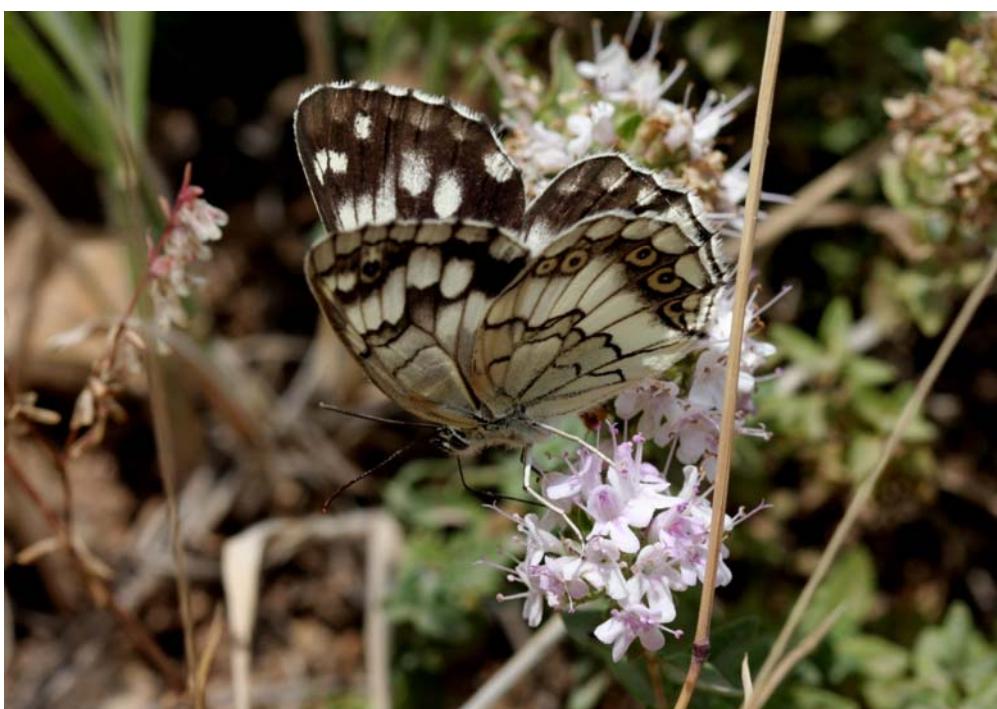


Fig. 23 - *Melanargia syriaca* (Satyridae), a male during feeding. Altınsaç NW 1900m, 23 6 2010. M. Kemal (Cesa)

- 75) ***Pseudochazara (s.str.) pelopea* (Klug,1832)** (Satyridae)
 76) ***Satyrus (Asatyrus (s.str.)) iranicus* Schwingenschuss,1939** (Satyridae)

Moths

Totally 47 species are listed below.

Adelidae

- 77) ***Nemophora fasciella* (Fabricius,1775)** (Adelidae) (Fig. 24)



Fig. 24 - *Nemophora fasciella* (Adelidae), at rest. Gevaş, Altınsaç NW 1780m 28 5 2009. M. Kemal (Cesa)

Coleophoridae

- 78) ***Coleophora kuehnella* (Goeze,1783)** (Coleophoridae) (Fig. 25)



Fig. 25 - *Coleophora kuehnella* (Coleophoridae), larva in bag on *Quercus* leaf. Altınsaç NW 1930m, 22 05 2013. M Kemal (Cesa)

Ethmiidae

- 79) *Ethmia chrysopyga* (Zeller,1844) (Ethmiidae)**

Geometridae

- 80) *Aplocera annexata* (Freyer,[1830]) (Geometridae)**
81) *Camptogramma bilineatum* (Linnaeus,1758) (Geometridae)
82) *Chiasmia clathrata* (Linnaeus,1758) (Geometridae) (Fig. 67)
83) *Eupithecia gratosata* Herrich-Schäffer,1861 (Geometridae) (Fig. 26)



Figs. 26, 27 - Left: *Eupithecia gratosata* (Geometridae), a resting female. Altınsaç SE 1680m, 26 6 2011. Right: *Scopula ornata* (Geometridae), at rest. Altınsaç 6 6 2009, M.Kemal (Cesa).

- 84) *Orthostixis calcularia* Lederer,1853 (Geometridae)**
85) *Orthostixis cibraria* (Hübner,[1799]) (Geometridae)
86) *Rhodostrophia* (s.str.) *discopunctata* Amsel,1935 (Geometridae)
87) *Scopula ornata* (Scopoli,1763) (Geometridae). Usually nocturnal species. First author observed it by day during rest (Fig. 27).
88) *Thaleria fimbrialis* (Scopoli,1763) (Geometridae)

Lymantriidae

- 89) *Parocneria detrita* (Esper,[1785]) (Lymantriidae). Caterpillars of this species are found on the foliage of *Quercus*, Altınsaç NW 1900m (Fig. 28).**



Fig.28 – *Parocneria detrita* (Lymantriidae), caterpillar feeds on foliage of *Quercus* (Fagaceae) Altınsaç NW 1900m, 22 5 2013. M. Kemal (Cesa)

Noctuidae

- 90) ***Agrotis (s.str.) ipsilon* (Hufnagel,1766)** (Noctuidae)
 91) ***Autographa gamma* (Linnaeus,1758)** (Noctuidae)
 92) ***Eublemma (rosina-gr.) amoenum* (Hübner,[1803])** (Noctuidae). Nocturnal species. First author observed a resting moth by day, at Altınsaç SE, 1680m, on 10 7 2013 (**Fig. 29**).



Figs. 29, 30 - Left: *Eublemma amoenum* (Noctuidae), at rest. Altınsaç 10 7 2013. Right: *Plutella xylostella* (Plutellidae). A vernal species at rest. Altınsaç NW 1780m 5 4 2016. M. Kemal (Cesa)

- 93) ***Mythimna (Aletia) vitellina* (Hübner,[1808])** (Noctuidae)
 94) ***Noctua (Latanoctua) orbona* (Hufnagel,1766)** (Noctuidae)
 95) ***Noctua (Paranoctua) comes* (Hübner,[1813])** (Noctuidae)
 96) ***Noctua (s.str.) pronuba* (Linnaeus,1758)** (Noctuidae)
 97) ***Simyra dentinosa* Freyer,1839** (Noctuidae)
 98) ***Trichoplusia ni* (Hübner,[1803])** (Noctuidae)

Oecophoridae

- 99) ***Esperia imitatrix* (Zeller,1847)** (Oecophoridae). Observed by day in *Quercus* woods.
 100) ***Pleurota* sp.** (Oecophoridae) Observed by day.

Plutellidae

- 101) ***Plutella (s.str.) xylostella* (Linnaeus,1758)** (Plutellidae) (**Fig. 30**)

Pyralidae

- 102) ***Cynaeda (Noctuelia) superba* (Freyer,[1844])** (Pyralidae)
 103) ***Mecyna lutealis* (Duponchel,1833)** (Pyralidae)
 104) ***Nomophila noctuella* ([Denis & Schiffermüller],1775)** (Pyralidae)
 105) ***Pyrausta amatalis* Rebel,1903** (Pyralidae) [vide: Kemal & Koçak (2016)]
 106) ***Pyrausta despicata* (Scopoli,1763)** (Pyralidae)
 107) ***Pyrausta obfuscata* (Scopoli,1763)** (Pyralidae)
 108) ***Pyraustimorpha inexpectata* Koçak & Seven,1995** (Pyralidae) This species was reported from Altınsaç (Kemal & Koçak, 2013).
 109) ***Treptopteryx pertusalis* (Geyer,[1832])** (Pyralidae)

Saturniidae

- 110) ***Saturnia (Perisomena) caecigena* Kupido,1825** (Saturniidae). Caterpillars were observed on *Quercus* (**Fig. 31**). Adult moth emerges in autumn.



Fig. 31 - *Saturnia (Perisomena) caecigena*, caterpillar on *Quercus* (Fagaceae). Altınsaç NW 1900m 12 6 2013. M. Kemal (Cesa)

Scythrididae

111) ***Scythris flabella* (Mann, 1861)** (Scythrididae) (Fig. 32)



Fig. 32 - *Scythris flabella* (Scythrididae), at rest. Altınsaç 1680m 21 6 2013. M. Kemal (Cesa)

Sphingidae

- 112) *Hyles conspicua* (Rothschild & Jordan, 1903)** (Sphingidae)
113) *Macroglossum stellatarum* (Linnaeus, 1758) (Sphingidae)

Tortricidae

- 114) *Aethes tesserana* ([Denis & Schiffermüller], 1775)** (Tortricidae)
115) *Aethes* sp. (Tortricidae) (Fig. 33).



Figs. 33, 34 – Left: *Aethes* sp. (Tortricidae), at rest on *Smyrnium cordifolium* (Apiaceae). Altınsaç SE 1680m, 21 6 2013. Right: *Ancylis mitterbacheriana* (Tortricidae). Altınsaç NW 1900m 22 5 2013, M. Kemal (Cesa)

- 116) *Ancylis mitterbacheriana* ([Denis & Schiffermüller], 1775])** (Tortricidae). First author observed this moth among the foliage of *Quercus* sp. (Fagaceae), Altınsaç NW 1900m 22 5 2013, M. Kemal (Fig. 34). Recently, this species was also recorded by us from Muş Province (East Turkey) [unpublished].
117) *Aphelia (Zelotherves) ferugana* (Hübner, 1793) (Tortricidae)
118) *Cydia orobana* (Treitschke, 1830) (Tortricidae)
119) *Hedya dimidioalba* (Retzius, 1783) (Tortricidae)
120) *Phtheochroa* sp. (Tortricidae)

Zygaenidae

- 121) *Adscita (s.str.) obscura* (Zeller, 1847)** (Zygaenidae)
122) *Zygaena (Agrumenia) loti* ([Denis & Schiffermüller], 1775) (Zygaenidae)
123) *Zygaena (Mesembrynus) tamara* Christoph, 1889 (Zygaenidae). The authors observed newly emerged *Zygaena tamara* on *Prangos* (Apiaceae) very near to cocoon and pupa. The wing pattern of the moth look like very much to *cambysea*, but distinguishabe by reddish patagium (Figs. 35, 36).



Figs. 35, 36 - *Zygaena tamara* ssp. *placida* (Zygaenidae). Top: newly emerged moth. Bottom: pupa and cocoon left behind on the same plant. Göründü NW 1650m, 21 6 2013. M. Kemal (Cesa)

Other Pterygot orders

Totally 122 species of 10 orders are listed below.

Odonata

Aeshnidae

124) *Anax imperator* Leach, 1815 (Aeshnidae)

Coenagrionidae

125) *Enallagma cyathigerum* (Charpentier, 1840) (Coenagrionidae) (**Fig. 37**)

Mantodea

Empusidae

126) *Empusa fasciata* Brullé, 1836 (Empusidae)



Fig. 37 - *Enallagma cyathigerum* (Coenagrionidae), at rest. Altınsaç 1680m 10 7 2013. M. Kemal (Cesa)

Orthoptera

Acrididae

Locusts inhabit usually at hot, dry, and stony places. For the time being, only 2 species is given below.

- 127) *Acrotylus insubricus* (Scopoli, 1786)** (Acrididae). Material studied: 2♂1♀. Van Prov., Gevaş, Altınsaç NW 1780m, 5 4 2016, M Kemal & A. Koçak (coll. Cesa) (Fig. 38).
128) *Arcyptera microptera* (Fischer de Waldheim, 1833) (Acrididae) (Fig. 39).



Fig. 38 – *Acrotylus insubricus* (Acrididae), a male at rest. Altınsaç NW 1780m, 5 4 2016. M.Kemal (Cesa)



Fig. 39 - *Arcyptera microptera* (Acrididae), during cleaning his face. Altınsaç SE 1680m, 23 6 2010. M. Kemal (Cesa)

Tettigoniidae

Tettigoniidae members are frequently seen in the thicket, or *Quercus* woodland.

- 129) *Tettigonia* sp.** (Tettigoniidae) (Fig. 40).
- 130) *Uvarovistia* sp.** (Tettigoniidae) (Fig. 41).



Figs. 40, 41 - Left: *Tettigonia* sp. (Tettigoniidae), a male. Right: *Uvarovistia* sp. (Tettigoniidae), a female. Both from same place and date, Altınsaç SE 1680m, 13 6 2013. M. Kemal (Cesa)

Dermoptera

Forficulidae

- 131) *Forficula auricularia* Linnaeus, 1758** (Forficulidae). A common species in the area (Fig. 42).



Fig. 42 – *Forficula auricularia* (Forficulidae), a group of both sexes among the leaves of *Eryngium* (Apiaceae) during a cold and stormy day. Van Prov., Gevaş, Göründü NW 1680m, 21 6 2013. Inner side of the cercus with a tooth in male, simple in female. M. Kemal (Cesa)

Hemiptera

Totally 25 species of 8 families are given below.

Coreidae

- 132) ***Coriomeris denticulatus* (Scopoli, 1763)** (Coreidae)
- 133) ***Gonocerus acuteangulatus* (Goeze, 1778)** (Coreidae)
- 134) ***Syromastus rhombeus* (Linnaeus, 1767)** (Coreidae)

Cydnidae

- 135) ***Canthophorus melanopterus* (Herrich-Schäffer, 1835)** (Cydnidae)

Lygaeidae

- 136) ***Horvathiolus superbus* (Pollach, 1781)** (Lygaeidae)
- 137) ***Spilostethus pandurus* (Scopoli, 1763)** (Lygaeidae). This species is usually observed on the ground (**Fig. 43**).
- 138) ***Spilostethus saxatilis* (Scopoli, 1763)** (Lygaeidae)

Miridae

- 139) ***Brachycoleus* sp.** (Miridae). The species looks like to *decolor* to some degree (**Fig. 44**)
- 140) ***Deraeocoris rutilus* (Herrich-Schäffer, 1838)** (Miridae) (**Fig. 45**)
- 141) ***Deraeocoris scutellaris* (Fabricius, 1794)** (Miridae)



Figs. 43, 44 – Left: *Spilostethus pandurus* (Lygaeidae). Right: *Brachycoleus* sp. (Miridae). Both from same place and date, Altınsaç SE 1680m, 12 6 2013. M. Kemal (Cesa)



Figs. 45, 46 - Left: *Deraeocoris rutilus* (Miridae). Altınsaç SE 1680m, 23 6 2010. Right: *Eurydema ventralis* (Pentatomidae), Altınsaç SE 1680m, 12 6 2013. M. Kemal (Cesa)

Pentatomidae

- 142) ***Carpocoris* (s.str.) *coreanus* Distant, 1899** (Pentatomidae)
- 143) ***Carpocoris* (s.str.) *fuscinervis* (Bohemian, 1851)** (Pentatomidae). This species hibernates. The authors observed it at Altınsaç, on 15 January 2011.
- 144) ***Dolycoris baccarum* (Linnaeus, 1758)** (Pentatomidae). On 15 January 2011, the authors observed this species at Altınsaç, during hibernation between *Verbascum* leaves.
- 145) ***Eurydema* (*Rubrodorsatum*) *ventralis* Kolenati, 1846** (Pentatomidae) (Fig. 46)
- 146) ***Eurydema* sp.** (Pentatomidae). First author observed this species at Altınsaç (Fig. 47).



Figs. 47, 48 - Left: *Eurydema* sp. (Pentatomidae). Right: *Eurydema ornatum* (Pentatomidae), in copula. Both from same place and date, Altınsaç SE 1680m, 21 6 2013. M. Kemal (Cesa)

- 147) *Eurydema (s.str.) ornatum* (Linnaeus,1758)** (Pentatomidae). First author observed a pair in copula on Apiaceae plant (Fig. 48).
- 148) *Graphosoma (Graphosomella) inexpectatum* Carapezza & Jindra,2008** (Pentatomidae) (Fig. 49).
- 149) *Graphosoma (s.str.) lineatum* (Linnaeus,1758)** (Pentatomidae) (Fig. 50).
- 150) *Graphosoma (s.str.) melanoxanthum* Horvath,1903** (Pentatomidae) (Fig. 51).
- 151) *Graphosoma (s.str.) semipunctatum* (Fabricius,1775)** (Pentatomidae) (Fig. 52).



Figs. 49, 50 – Left: *Graphosoma inexpectatum* (Pentatomidae). Right: *Graphosoma lineatum* (Pentatomidae). Both from same plant, place and date, on *Smyrnium cordifolium* (Apiaceae). Altınsaç SE 1680m, 21 6 2013. M. Kemal (Cesa)



Figs. 51, 52 – Left: *Graphosoma melanoxanthum* (Pentatomidae), Altınsaç NW 1900m, 26 6 2011. Right: *Graphosoma semipunctatum* (Pentatomidae), on *Smyrnium cordifolium* (Apiaceae). Altınsaç SE 1680m, 21 6 2013. M. Kemal (Cesa)



Fig. 53 – A remarkable colour adaptation of *Stagonomus amoenus* (Pentatomidae). Altınsaç SE 1680m 18 5 2013, M. Kemal (Cesa)

152) *Mustha spinosula* (Lefebvre,1831) (Pentatomidae)

153) *Stagonomus (s.str.) amoenus* (Brullé,1832) (Pentatomidae). The author observed a pair in copula on *Salvia* sp. (Lamiaceae), on 18.5.2013 (**Fig. 53**).

Rhopalidae

154) *Corizus hyoscyami* (Linnaeus,1758) (Rhopalidae)

Rhyparochromidae

155) *Rhyparochromus phoeniceus* (Rossi,1794) (Rhyparochromidae). Not uncommon on the ground early in the spring. Material studied: 2♂. Turkey, Van Prov., Gevaş, Altınsaç NW 1780m 5.4.2016, M. Kemal & A. Koçak leg. (coll. Cesa).

Tingidae

156) *Copium clavicornis* (Linnaeus,1758) (Tingidae). On 15 January 2011, the authors observed this species at Altınsaç, during hibernation (**Fig. 54**).



Fig. 54- *Copium clavicornis* (Tingidae), an hibernating individuum. Altınsaç SE 1680m 15. 1. 2011. M. Kemal (Cesa)

Homoptera

Only 3 species of 2 families are given below.

Cercopidae

157) *Aphrophora alni* (Fallén,1805) (Cercopidae)

158) *Cercopis intermedia* Kirschbaum,1868 (Cercopidae)

Cicadidae

159) *Cicadatra persica* Kirkaldy,1909 (Cicadidae)

Planipennia

A single species is given below.

Nemopteridae

- 160) *Nemoptera sinuata* Olivier, 1811 (Nemopteridae) (Fig. 55)**



Fig. 55 – *Nemoptera sinuata* (Nemopteridae), feeding on *Achillea* (Asteraceae). Altınsaç SE 1680m, 25 6 2011. M. Kemal (Cesa)

Diptera

Only 31 species of 9 families are given below.

Asilidae

- 161) *Saropogon* sp. (Asilidae) (Fig. 56)**



Figs. 56, 57 – Left: *Saropogon* sp. (Asilidae), at rest. Altınsaç SE 1680m 23 6 2010. Right: *Stenopogon* sp. (Asilidae), in copula. Altınsaç SE 1680m, 10 7 2013. M. Kemal (Cesa)

162) *Stenopogon* sp. (Asilidae). Largest asilid in the studying area. Adults fly in July-August. First author observed a pair in copula (**Fig. 57**).

Bibionidae

163) *Bibio hortulanus* (Linnaeus,1758) (Bibionidae). A vernal species, generally common in convenient habitats. The author observed a pair in copula on 18 May 2013 (**Fig. 58**).



Fig. 58 – *Bibio hortulanus* (Bibionidae), in copula. Altınsaç SE 1680m, 18 5 2013, M. Kemal (Cesa)

164) *Bibio marci* (Linnaeus,1758) (Bibionidae)

Bombyliidae

- 165) *Bombyella atra* (Scopoli,1763)** (Bombyliidae)
- 166) *Callostoma fascipenne* Macquart,1840** (Bombyliidae)
- 167) *Exoprosopa ahtamara* Dils & Özbek,2007** (Bombyliidae)
- 168) *Exoprosopa pectoralis* Loew,1862** (Bombyliidae)
- 169) *Hemipenthes morio* (Linnaeus,1758)** (Bombyliidae)
- 170) *Exoprosopa rivularis* (Meigen,1820)** (Bombyliidae)
- 171) *Heteralonia (Acrodisca) suffusa* (Klug,1832)** (Bombyliidae)
- 172) *Exoprosopa pectoralis* Loew,1862** (Bombyliidae)
- 173) *Hemipenthes velutina* (Meigen,1820)** (Bombyliidae)
- 174) *Villa hottentotta* (Linnaeus,1758)** (Bombyliidae)

Nemestrinidae

175) *Neorhynchocephalus tauscheri* (Fischer,1812) (Nemestrinidae). Adults feed frequently on the flowers of *Anchusa* (Boraginaceae) (**Fig. 59**)



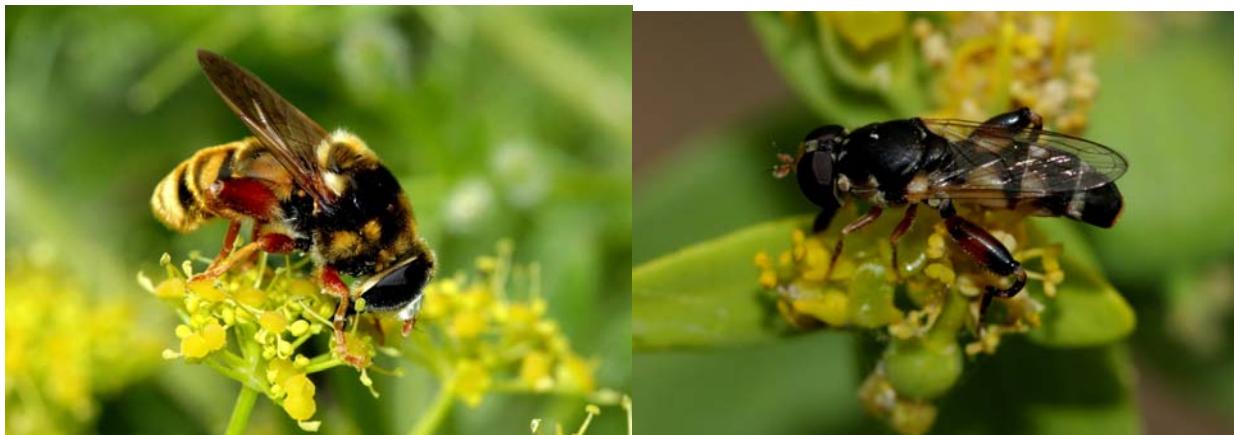
Fig. 59 - *Neorhynchocephalus tauscheri* (Nemestrinidae), Altınsaç NW 1900m, 26 6 2011. M. Kemal (Cesa)

Platystomidae

- 176) ***Platystoma chrysotoxum* Hendel, 1913** (Platystomidae)
- 177) ***Platystoma seminationis* (Fabricius, 1775)** (Platystomidae)

Syrphidae

- 178) ***Eristalis (Eoseritalis) arbustorum* (Linnaeus, 1758)** (Syrphidae)
- 179) ***Eristalis (s.str.) tenax* (Linnaeus, 1758)** (Syrphidae)
- 180) ***Merodon* sp.** (Syrphidae). Material of this genus will be separately studied (**Fig. 60**).



Figs. 60, 61 – Left: *Merodon* sp. (Syrphidae) on Apiaceae plant. Altınsaç SE 1680m 18 5 2013. Right: *Syritta pipiens* (Syrphidae) on *Euphorbia* sp. Altınsaç SE 1680m 23 6 2010. M. Kemal (Cesa)

- 181) ***Sphaerophoria scripta* (Linnaeus, 1758)** (Syrphidae)
- 182) ***Syritta pipiens* (Linnaeus, 1758)** (Syrphidae) (**Fig. 61**)

Tephritidae

- 183) ***Campiglossa misella* (Loew, 1869)** (Tephritidae)

- 184) *Campiglossa producta* (Loew,1844)** (Tephritidae)
185) *Sphenella marginata* (Fallén,1814) (Tephritidae)
186) *Tephritis postica* (Loew,1844) (Tephritidae)
187) *Trupanea stellata* (Fuesslin,1775) (Tephritidae)
188) *Urophora solstitialis* (Linnaeus,1758) (Tephritidae). “a common species in Europe and Turkey infesting various *Carduus* thistles. Wing pattern hypervariable (in the dark form it is identical with *U. terebrans*, but the males often are much lighter, often with reduced crossbands -- as on this picture); fore femur with dark band, which never occurs in *U. affinis* and closely related knapweed specialists...” (Dr. V. Korneyev, pers. comm., via *Diptera.info* on 7. 4. 2016).¹ (Fig. 62)



Fig. – *Urophora solstitialis* (Tephritidae), in copula. Altınsaç SE 1680m, 21 6 2013. M.Kemal (Cesa)

Tipulidae

- 189) *Nephrotoma nox* (Riedel,1910)** (Tipulidae)

Ulidiidae

- 190) *Otites formosa* (Panzer,1798)** (Ulidiidae)
191) *Seioptera vibrans* (Linnaeus,1758) (Ulidiidae)

Hymenoptera

Only 19 species of 8 families are listed below.

Apidae

- 192) *Anthophora* (s.str.) *plumipes* (Pallas,1772)** (Apidae)
193) *Apis* (s.str.) *mellifera* Linnaeus,1758 (Apidae)
194) *Xylocopa* (s.str.) *violacea* (Linnaeus,1758) (Apidae)

¹ http://www.diptera.info/forum/viewthread.php?forum_id=5&thread_id=72738&pid=305945#post_305945

- 195) *Xylocopa (Copoxyla) iris* (Christ,1791) (Apidae)**

Crabronidae

- 196) *Sphecius conicus* (Germar,1817) (Crabronidae)**
197) *Sphecius nigricornis* (Dufour,1838) (Crabronidae)

Cynipidae

The galls of the following 10 species are reported from Van Prov., Gevaş, Altınsaç NW 1900m, *Quercus* woodland, on 5-4-2016, M.Kemal (cf. Kemal & Koçak, 2010a,b).

- 198) *Andricus coriarius* (Hartig,1843) (Cynipidae)**
199) *Andricus grossulariae* Giraud,1859 (Cynipidae)
200) *Andricus insanus* (Westwood,1837) (Cynipidae)
201) *Andricus kollari* (Hartig,1843) (Cynipidae)
202) *Andricus ligniculus* (Hartig,1840) (Cynipidae)
203) *Andricus lucidus* (Hartig,1843) (Cynipidae)
204) *Andricus megalucidus* Melika et al.,2004 (Cynipidae)
205) *Andricus polycerus* (Giraud,1859) (Cynipidae)
206) *Andricus quercustozae* (Bosc,1792) (Cynipidae)
207) *Andricus tomentosus* (Trotter,1901) (Cynipidae)

Formicidae

Frequently observed in the studying area (**Fig. 63**).

Ichneumonidae

- 208) *Amblyteles armatorius* (Forster,1771) (Ichneumonidae)**

Megachilidae

- 209) *Anthidium (Rhodanthidium) superbum* Radoszkowski,1876 (Megachilidae)**

Mutillidae

The material will be separately studied. The females are observed usually on the ground. This time the first author recorded a female on the bud of *Asteraceae* together with other ants (**Fig. 63**).

Vespidae

- 210) *Delta dimidiatipenne* (Saussure,1852) (Vespidae)**

Coleoptera

Totally 35 species of 10 families are listed below.

Buprestidae

- 211) *Acmaeodera (s.str.) flavolineata* Laporte & Gory,1835 (Buprestidae)**

Carabidae

212) *Cicindela desertorum* Dejean, 1825 (Carabidae). Material studied: 2♂. Van Prov., Gevaş, Altınsaç NW 1780m, 5 4 2016, M. Kemal & A.Koçak leg. (coll. Cesa) (**Fig. 64**)



Fig. 63 – A mutillid female with ants on the bud of Asteraceae. SE of Altınsaç 1680m. 10 7 2013. M. Kemal (Cesa)



Fig. 64 – *Cicindela desertorum* (Carabidae). Altınsaç NW 1780m, 5 4 2016. M. Kemal (Cesa)

Cerambycidae

213) *Agapanthia (Epoptes) walteri* (Reitter, 1898) (Cerambycidae) (**Fig. 65**).

- 214) *Clytus schneideri* Kiesenwetter, 1879** (Cerambycidae)
- 215) *Dorcadion (Cribridorcadion) pedestre* (Poda, 1761)** (Cerambycidae)
- 216) *Dorcadion (Cribridorcadion) scabricolle* (Dalman, 1817)** (Cerambycidae). Adults of the genus Dorcadion are vernal, and often seen on bare ground during walking. Material studied: 2♂1♀. Van Prov., Gevaş, Altınsaç NW 1780m, 5.4.2016, M.Kemal & A.Koçak leg. (coll. Cesa) (Fig. 66).
- 217) *Judolia erratica* (Dalman, 1817)** (Cerambycidae) (Fig. 67)
- 218) *Mallosia (Eumallosia) imperatrix* Abeille de Perrin, 1885** (Cerambycidae) (Fig. 68).
- 219) *Opsilia coeruleascens* (Scopoli, 1763)** (Cerambycidae)
- 220) *Paraplagionotus floralis* (Pallas, 1773)** (Cerambycidae). A common species in the area. Adults are seen frequently on various Apiaceae, Asteraceae (Achillea etc.) (Fig. 69).
- 221) *Purpuricenus bitlisiensis* Pic, 1902** (Cerambycidae)
- 222) *Purpuricenus cornifrons* Sabbadini & Pesarini, 1992** (Cerambycidae)
- 223) *Rutpela maculata* (Poda, 1761)** (Cerambycidae)
- 224) *Stenopterus rufus* (Linnaeus, 1767)** (Cerambycidae) (Fig. 70).
- 225) *Stictoleptura cordigera* (Fuesslin, 1775)** (Cerambycidae)

Chrysomelidae

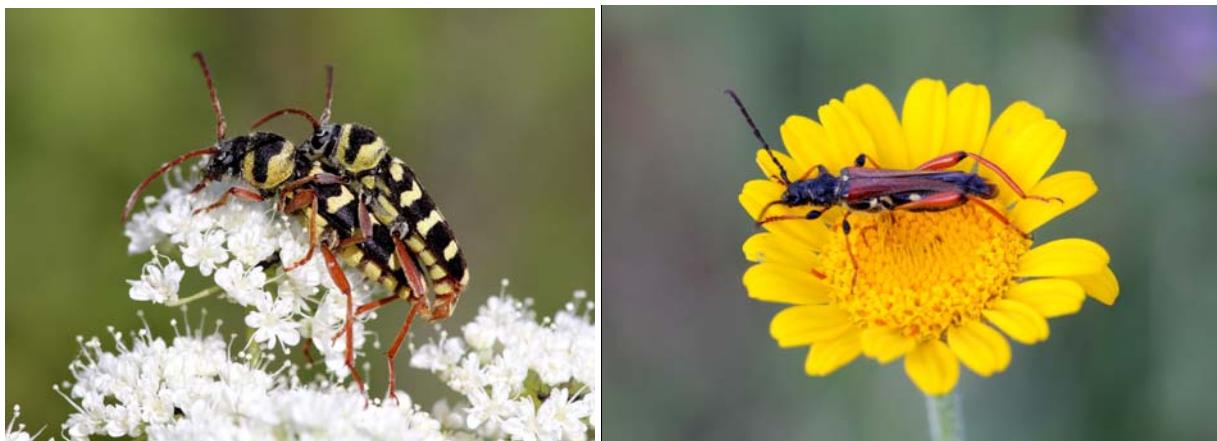
- 226) *Cryptocephalus bipunctatus* (Linnaeus, 1758)** (Chrysomelidae)
- 227) *Clytra cingulata* Weise, 1898** (Chrysomelidae)
- 228) *Hispa atra* Linnaeus, 1767** (Chrysomelidae)



Figs. 65, 66 – Left: *Agapanthia walteri* (Cerambycidae) on *Smyrnium cordifolium* (Apiaceae). Altınsaç SE 1680m, 21.6.2013. **Right:** *Dorcadion scabricolle* (Cerambycidae), a male. Altınsaç NW 1780m, 5.4.2016. M. Kemal (Cesa)



Figs. 67, 68 - Left: *Chiasmia clathrata* (Geometridae) captured by a thomisid and *Judolia erratica* (Cerambycidae). Altınsaç 1680m 12.6.2013. Right: *Mallosia imperatrix* ssp. *tauricola* (Cerambycidae). Gevaş Göründü N 1665m, 23.6.2010 M Kemal (Cesa)



Figs. 69, 70 – Left: *Plagionotus floralis* (Cerambycidae), in copula on Apiaceae. Right: *Stenopterus rufus* (Cerambycidae) on Asteraceae flower. Both from same place and date, Altınsaç 1680m 26 6 2011. M. Kemal (Cesa)

Cleridae

- 229) *Tilloidea unifasciata* (Fabricius,1787) (Cleridae) (Fig. 71)**
230) *Tillus pectinicornis* Abeille de Perrin,1892 (Cleridae) (Fig. 72)



Figs. 71, 72 - Left: *Tilloidea unifasciata*. Right: *Tillus pectinicornis* (Cleridae). Both from Altınsaç NW 1900m, on *Quercus* sp. (Fabaceae), 22 5 2013. M. Kemal (Cesa)

- 231) *Trichodes ephippiger* Chevrolat,1874 (Cleridae)**
232) *Trichodes inermis* Reitter,1893 (Cleridae)
233) *Trichodes heydeni* Escherich,1892 (Cleridae)

Coccinellidae

- 234) *Coccinella* (s.str.) *septempunctata* Linnaeus,1758 (Coccinellidae)**

Curculionidae

- 235) *Cyphocleonus (Neocyphocleonus) dealbatus* (Gmelin,1790) (Curculionidae)**
236) *Coniocleonus nigrosuturatus* (Goeze,1777) (Curculionidae). Material studied: 1♂.
 Van Prov., Gevaş, Altınsaç NW 1780m, 5 4 2016, M.Kemal & A.Koçak leg. (coll. Cesa).

- 237) *Lixus* sp. (Curculionidae) (Fig. 73)**

Glaphyridae

- 238) *Amphicoma (Eulasia) arctos* (Pallas,1781) (Glaphyridae)**



Figs. 73, 74 – Left: *Lixus* sp. (Curculionidae), male and female. Altınsaç SE 1680m 10 7 2013. Right: *Hycleus scabiosae* (Meloidae) Altınsaç SE 1680m 12 6 2013. M. Kemal (Cesa)

Meloidae

- 239) *Nemognatha* (s.str.) *chrysomelina* (Fabricius,1775)** (Meloidae)
- 240) *Hycleus scabiosae* (Olivier,1811)** (Meloidae) (Fig.)
- 241) *Mylabris* sp.** (Meloidae)

Scarabaeidae

- 242) *Oxythyrea cinctella* (Schaum,1841)** (Scarabaeidae)
- 243) *Protaetia (Netocia) trojana* (Gory & Percheron,1833)** (Scarabaeidae)
- 244) *Sisyphus schaefferi* (Linnaeus,1758)** (Scarabaeidae)
- 245) *Tropinota (Epicometis) hirta* (Poda,1761)** (Scarabaeidae)

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Research Article

<http://zoobank.org/urn:lsid:zoobank.org:pub:CDCC5832-37B0-41FA-B8A7-E3A4BAEDB842>

Review of the Armenian fauna of the family Dolichopodidae (Diptera)

Oleg P. Negrobov², V.S. Oganesyan³, Olga O. Maslova⁴

Abstract: Review of the Armenian fauna of the family Dolichopodidae (Diptera). *Cesa News* 124: 32–35.

New records of Dolichopodidae (Diptera) from Republic of Armenia are presented. 3 species are recorded from Transcaucasica for the first time and 12 species and 1 subspecies are recorded from Republic of Armenia for the first time.

Key words: Diptera, Dolichopodidae, Armenia, fauna.

The first notes on the Armenian fauna of the family Dolichopodidae was given in the paper of A. A. Stackelberg (1926). Three new species have been described resulting from the studying of collections of Diptera of Armenian Museum: *Dolichopus armeniacus* Stackelberg, 1926, *Hercostomus shelkovnikovi* Stackelberg, 1926, *Scellus paramonovi* Stackelberg, 1926; and data on the distribution of 19 species of the family Dolichopodidae were presented: *Campsicnemus umbripennis* Loew, 1856, *Chrysotus suavis* Lw. 1857, *Dolichopus excisus* Loew, 1859, *Dolichopus griseipennis* Stann., 1831, *Dolichopus lepidus lepidus* Staeger, 1842, *Dolichopus nubilus* Meigen, 1824, *Dolichopus simplex* Meigen, 1824, *Hercostomus rusticus* Meigen, 1824, *Hercostomus varicoloris* Becker, 1917, *Hydromorphus balticus* Meigen, 1824, *Liancalus virens* Scopoli, 1763, *Medetera diadema* (Linnaeus, 1767), *Poecilobothrus regalis* (Meigen, 1824), *Poecilobothrus nobilitatus* (Linnaeus, 1767), *Rhaphium laticornis* Fl. 1823, *Syntormon pallipes* Fabricius, *Syntormon denticulatum* Zetterstedt, *Tachytrechus notatus* (Stannius 1831), *Tachytrechus ripicola* Loew, 1857.

Several dolichopodid species from Armenia were noted or described later: *Hercostomus armenorum* Stackelberg, 1934 was described from Armenia by A. A. Stackelberg (Stackelberg, 1934); *Scellus paramonovi* Stackelberg, 1951 and *Scellus tshernovskii* Stackelberg, 1951 were described in 1951 (Stackelberg, 1951) and *Medetera pallidior* (Stackelberg, 1937) was noted from Armenia by O. P. Negrobov in 1966 (Negrobov, 1966).

A number of new species has been described by O. P. Negrobov and co-authors in different years from the materials of collection of Laboratory of Insect Systematics of Zoological Institute of the Russian Academy of Sciences and Zoological Museum of Moscow State University: *M. meridionalis* Negrobov, 1967, *M. mixta* Negrobov, *M. mixta* Negrobov, 1967, *M. verae* Negrobov, 1967 (Negrobov, 1967 a, Negrobov, 1967 b), *M. armeniaca* Negrobov, 1972 (Negrobov, Stackelberg, 1972).

Also the following species were noted for the fauna of Armenia in different years: *Hydromorphus callostomus* Loew, 1857 (Negrobov, 1975), *Hercostomus apollo* (Loew, 1869), *H.*

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phoebus Parent, 1927 (Negrobov, 1976), *Hercostomus bicolor* Macquart, 1828 (Negrobov, Shamshev 1984), *Campsicnemus curvipes* (Fallén, 1823) (Negrobov, Zlobin, 1978), *Dolichopus perversus* Loew, 1871 and *Hercostomus bicolor* (Macquart, 1828) (Negrobov, Shamshev, 1984), *Dolichopus oganesianus* Negrobov, 1986 (Negrobov, 1986), *D. cilifemoratus* Macquart, 1827, *D. signifer* Haliday 1838, *Hercostomus exarticulatus* (Loew, 1857) (Negrobov, Rodionova, 2004), *Chrysotus collini* Parent, 1923 (Maslova, Negrobov, 2011), *Ch. gramineus* (Fallen, 1823), *Ch. laesus* (Wiedemann, 1817), *Ch. neglectus* (Wiedemann, 1817), *Ch. pennatus* Lichtwardt, 1902 (Maslova, Negrobov, Selivanova, 2008), *Thrypticus bellus* Loew, 1869 (Selivanova, Negrobov, Maslova, 2009), *Sciapus medvedevi* Negrobov et Selivanova, 2009 (Negrobov, Selivanova, 2009), *Campsicnemus tomkovichi* Grichanov, 2009 (Grichanov, 2009).

The note of *Campsicnemus barbitibia* Stackelberg, 1947 from Armenia (Oganesyan, Terteryan, 1985) should be referred to a new morphologically close species *Campsicnemus tomkovichi* Grichanov, 2009.

Material and methods

The material for this paper were collected in 1984, 2012 and 2013 on Armenia by V. S. Oganesyan, an officer of the Institute of Zoology of the Armenian Academy of Sciences. Also we used materials of insect collection from the Laboratory of Insect Systematic of Zoological Institute of the Russian Academy of Sciences.

Results

Campsicnemus varipes Loew, 1859

Material. 1 ♂, 1 ♀, Armenia: Khosrov Reserve, Garni forestry, Kaladibi, 6.07.1984 (Oganesyan). Species was found in the foothills and mountainous regions of Armenia.

Species is recorded from Armenia for the first time.

Dolichopus campestris Meigen, 1824

Material. 1 ♂, 2 ♀, Armenia: Meghri region, Lichk, 20.VII.1984 (Oganesyan). In Armenia the species occurs in the middle reach of the river Araks.

Species is recorded from Armenia for the first time.

Dolichopus nubilis Meigen, 1824

Material. 1 ♂, 2 ♀, Armenia: Vardenis area, river Masrik, 12.07.1984 (Oganesyan). Species was found on Lake Sevan areas.

Species is recorded from Armenia for the first time.

Dolichopus perversus Loew, 1871

Material. 1 ♂, Armenia: Berdadzor gorge of the river, near Yerevan, 14.09.1971 (Richter). Species is recorded from Armenia and Transcaucasia for the first time.

Dolichopus ungulates (Linnaeus, 1758)

Material. 8 ♂, 4 ♀, Armenia: Kotayk region, Aghavnadzor, 18.07.2012 (Oganesyan). Species is recorded from Armenia and Transcaucasia for the first time.

Hercostomus germanus (Wiedemann, 1817)

Material. 3 ♂, Armenia: Kamo district, Noraduz, 29.07.1984; Megri region, Lichk, 10.08.1984; Martuni region, river Astghadzor, 20.07.1984 (Oganesyan). This species is widespread in mountainous regions.

Species is recorded from Armenia for the first time.

Hercostomus gracilis (Stannius, 1831)

Material. 3 ♂, 1 ♀, Armenia: Khosrov reserve, Kalabidi, river Contour, 11.08.2013 (Oganesyan).

Species is recorded from Armenia and Transcaucasia for the first time.

***Hercostomus nigriplantis* (Stannius, 1831)**

Material. 4 ♂, 2 ♀, Armenia: Megri region, Lichk, 6.07.1984; Vardenis area, river Masrik, 12.07.1984; Martuni region, river Astghadzor, 30.07.1984 (Oganesyan). This species distribute in the mountainous regions of Armenia.

Species is recorded from Armenia and Transcaucasia for the first time.

***Poecilobothrus chrysosyzygos* (Wiedemann, 1817)**

Material. 1 ♂, 1 ♀, Armenia: Vardenis area, river Masrik, 12.07.1984 (Oganesyan). The species is known from in mountainous regions.

Species is recorded from Armenia for the first time.

***Poecilobothrus ducalis* Loew, 1857**

Material. 6 ♂, 4 ♀, Armenia: Vayk, Arpa River, near the Jermuk bridge, 4.08.2013 (Oganesyan).

Species is recorded from Armenia for the first time.

***Poecilobothrus flavifemoratus varicoloris* Grichanov et Tonguc, 2010**

Material. 6 ♂, 4 ♀, Armenia: Vayk, Arpa River, near the Jermuk Bridge, 4.08.2013 (Oganesyan).

Species was described from Turkish, it is recorded from Armenia and Transcaucasia for the first time.

***Rhaphium caliginosum* Meigen, 1824**

Material. 1 ♂, Armenia: Shusha region, Berdadzor, 28.07.1979; 4.09.1971 (Richter).

Species is recorded from Armenia for the first time.

***Tachytrechus kowarzi* Mik, 1864**

Material. 1 ♂, Armenia: Khosrov Reserve, Garni forestry, town Kaladibi, 6.07.1984 (Oganesyan).

The species was recorded in Armenia in Khosrov Reserve. Species is recorded from Armenia for the first time.

***Tachytrechus petraeus* Loew, 1871**

Material. 1 ♂, Armenia: gorge of the River Berdadzor, vicinities of Yerevan, 14.09.1971 (Richter); 2 ♂, 1 ♀, Armenia: Kotayk region, Aghavnadzor, 18.07.2012 (Oganesyan); 3 ♂, 2 ♀, Armenia: Khosrov Reserve, Garni forestry, town Kaladibi, 6.07.1984; Meghri district, village Lichk, 20.07.1984 (Oganesyan); 1 ♂, Armenia: Vayk, Arpa River, near the Jermuk Bridge, 4.08.2013 (Oganesyan).

Species is recorded from Transcaucasia for the first time. Earlier species was known from Tajikistan and North Africa.

Thus, 63 species and 1 subspecies from 14 dolichopodid genera currently are known from the Republic of Armenia. The most widely distributed species is the species of the following genera: *Dolichopus* (the fauna of Armenia includes 12 species of the genus), *Hercostomus* (7 species), *Medetera* (7 species), *Chrysotus* (4 species), *Poecilobothrus* (3 species and 1 subspecies), *Tachytrechus* (4 species), *Campsicnemus* (3 species) and *Scellus* (3 species). The species of the genus *Hydrophorus*, *Rhaphium*, *Syntormon* are less diverse. The fauna of Armenia includes two species of each of these genera. The fauna of the genera *Liancalus*, *Sciapus* and *Thrypticus* includes one species. 3 species are recorded from Transcaucasica for the first time and 12 species and 1 subspecies are recorded from Republic of Armenia for the first time.

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